

WHAT IS CLAIMED IS:

1. A flat flexible cable having an elongate composite structure comprising:

an elongate region of conductive material;

an insulative material surrounding the conductive material;

first and second elongate flat conductors sandwiching the insulative material surrounding the elongate region of conductive material;

first and second elongate flat insulators on opposite sides of the first and second elongate flat conductors to the insulative material surrounding the conductive material; and

a coaxial cable including a first conductive portion electrically interconnecting the first and second conductors on a one side of the structure and a second conductive portion electrically interconnecting the first and second conductors on an opposite side of the structure, wherein the composite structure is flat and foldable without structural damage to the cable or its component parts.

2. A flat cable according to Claim 1, wherein one of the first and second conductors and at least one of the first and second conductive portions comprise a single element.

3. A flat cable according to Claim 2, wherein the single element is a conductive foil.

4. A flat cable according to Claim 1, further comprising first and second insulative portions, positioned adjacent to the first and second conductive portions

respectively, each insulative portion being in contact with the first and second flat insulators.

5. A flat cable according to Claim 4, wherein the first flat insulator and at least one of the first and second insulative portions comprise a single element.

6. A flat cable according to Claim 4, wherein a single insulative element comprises the first and second flat insulators and the first and second insulative portions.

7. A flat cable according to Claim 1, wherein at least one of: (a) the flat conductors, (b) the conductive region and (c) the conductive portions is a foil.

8. A flat cable according to Claim 1, wherein at least one of: (a) the flat conductors, (b) the conductive region and (c) the conductive portions is a mesh.

9. A flat cable according to Claim 6, further comprising at least one conductor intercalated within the single insulative element.

10. A flat flexible cable having an elongate composite structure comprising:

an elongate region of conductive material;

an insulative material surrounding the conductive material;

first and second elongate flat conductors sandwiching the insulative material surrounding the elongate region of conductive material; and

first and second elongate flat insulators on opposite sides of the first and second elongate flat conductors to the insulative material surrounding the conductive material,

the composite structure being flat and foldable without structural damage to the cable or its component parts, and

the insulative material between the conductive region and the respective flat conductors having a constant thickness along the length of the cable.

11. A flat flexible cable having an elongate composite structure comprising:

an elongate region of conductive material;

an insulative material surrounding the conductive material;

first and second elongate flat conductors sandwiching the insulative material surrounding the elongate region of conductive material; and

first and second elongate flat insulators on opposite sides of the first and second elongate flat conductors to the insulative material surrounding the conductive material,

the composite structure is itself flat and foldable without structural damage to the cable or its component parts, and

at least one of the first and second flat insulators having a reduced thickness at a preselected region along the cable.

12. A flat flexible cable having an elongate composite structure comprising:

an elongate region of conductive material;

an insulative material surrounding the conductive material;

first and second elongate flat conductors sandwiching the insulative material surrounding the elongate region of conductive material; and

first and second elongate flat insulators on opposite sides of the first and second elongate flat conductors to the insulative material surrounding the conductive material,

the composite structure being flat and foldable without structural damage to the cable or its component parts, and

at least one terminal contact having a surface exposed by an opening through at least a portion of the cable structure, the surface being part of one of a group consisting of: one of the flat conductors; and the conductive region.

13. A method of manufacturing a flat flexible cable having an elongate composite structure comprising:

forming a surround of insulative material around an elongate region of conductive material;

placing a first and a second flat conductor on either side of the insulative material;

placing a first and a second flat insulator on opposite sides of the first and second flat conductors to the insulative material surrounding the conductive material; and

electrically interconnecting (a) a first conductive portion to the first and second flat conductors on one side of the cable and (b) a second conductive portion to the first and second flat conductors on an opposite side of the cable thereby completing an outer conductive screen, the composite structure being foldable without damage to the cable or its component parts.

14. A method of manufacturing a flat cable structure according to Claim 13, wherein at least some of the component parts are consecutively stacked one on top of the other.

15. A method of manufacturing a flat cable structure according to Claim 13, wherein at least one of the component parts is formed by chemical deposition.

16. A method of manufacturing a flat cable structure according to Claim 13, further including forming an opening through the cable structure to form a terminal having an exposed surface consisting of: one of the flat conductors and the conductive material.

17. A method of manufacturing a flat cable structure according to Claim 16, wherein the opening is formed by one of the following processes: an etching process and by mechanical drilling.